2002 Governor's Awards for Environmental Excellence Recipients

Energy/Renewable Resources

City of South Bend – Division of Environmental Services

South Bend, St. Joseph County

Contact: John J. Dillon, Ph.D. (574) 277-8515

The City of South Bend's wastewater treatment plant blower and engines replacement project is an excellent example of maximizing the use of a renewable energy source and minimizing the use of fossil fuels. The new engine driven blower conserves natural gas and electricity by using methane gas, a by-product of the treatment process, as a primary fuel. The new blower and engines will also reduce the amount of air pollution the older equipment generated. By focusing on current needs and including a vision to the future, the City of South Bend has improved its wastewater treatment process and is positioned to meet the community's changing needs over the next 20 years and beyond.

Greening the Government

Indiana Department of Transportation / Southern Indiana Solid Waste Management Districts / Purdue University

Vincennes, Knox County

Contact: Debbie Steinkamp (812) 362-7401

In the summer of 2000, with markets for glass weakening and transportation costs rising, solid waste management districts in southern Indiana were forced to seek alternative markets to ensure sustainability of their residential glass recycling programs. What resulted was a unique and effective partnership between multiple state and local agencies. By partnering with Indiana's Departments of Transportation (INDOT) and Purdue University the group produced solutions that benefited the environment, expanded economic development and resulted in savings to the government. Aside from building a sustainable market for glass recycling by finding a niche market and tackling the transportation issue, the project developed a recurring special provision for the use of crushed glass in state and local transportation construction projects.

Land Use

Brownfield Development Group, LLC

Indianapolis, Marion County

Contact: David F. Valinetz (317) 347-9590 x 19

Brownfield Development Group, LLC revitalized a former Civil Defense building on the near northwest side of Indianapolis. Following renovation, BDG, LLC moved their corporate headquarters into the building and began moving various businesses and

community action groups into the area. The 125,000 square foot city building had been abandoned and became a neighborhood eyesore. Through the collective efforts of the private developer, public interest groups and the neighborhood it has become an anchor in the community. The building is home to mainstream businesses, minority start-up business and training schools that offer real job training and placement assistance to local and citywide residents. This is a success story of public-private enterprise, turning a neglected building into a real asset to the community and acting as a spark for further revitalization in the area.

Hammond Redevelopment Commission

Hammond, Lake County

Contact: Sam Senn (219) 933-4950

The Hammond Redevelopment Commission (HRC) acquired a 350 acre parcel of property in Hammond Indiana which was a former industrial slag dump site. The waste was historically placed directly into George Lake creating substantial environmental damage to the ecosystem. The HRC embarked on a restoration program by cleaning the dump site and clearing sediments out of the lake system. The site is the one of the largest in the Indiana Voluntary Remediation Program and includes recycling of over 200,000 cubic yards of waste bottom ash and waste water treated biosolids. The project incorporates a youth life skills training center and an 18-hole golf course to generate revenue for sustaining the environmental restoration.

Outreach or Education

Center for Earth and Environmental Science - IUPUI

Indianapolis, Marion County

Contact: Dr. Lenore P. Tedesco (317) 274-7154

The Lilly ARBOR Project is an ecological restoration program on the White River in downtown Indianapolis adjacent to the IUPUI campus, that is completing a key component of a conservation corridor through Marion County. A fundamental cornerstone of the project has been the scientific validity of an experiment in ecological restoration designed to provide critically needed scientific research about the best strategies for river-margin restoration. The research and design plan actively involves researchers, students, educators, and corporate and community volunteers in the data collection and site stewardship and is a model collaboration that is breaking new ground in both scientific and educational outreach circles. The program is an outstanding example of the potential for University/corporate/community cooperation in urban environmental restoration and educational outreach.

Rick Parsons

Kokomo, Howard County

Contact: Rick Parsons (765) 883-5461

Rick Parsons started an interdisciplinary water-testing project on the Wildcat Creek in 1991 at Kokomo High School. High school biology students monitor the water quality of the Wildcat Creek in Kokomo and Howard County. Students use chemical and biological data to learn more about the health of Wildcat Creek and its watershed. This was the first program that involved the regular monitoring of water by students in Indiana. Students use an interdisciplinary approach involving science, math, social studies, and English to study the natural history of water resources. Students create portfolios of writing that have been published in the book *Meanderings*. This hands-on science project has involved hundreds of students over the last ten years and inspired other water-monitoring programs around the state. Students, parents, and the community have gained a new appreciation for water and our natural resources.

Southern Indiana Solid Waste Management Districts: Illegal Dumping Campaign Mt. Vernon, Posey County

Contact: Patricia Ann Bunner Colbert (812) 838-1613

Twenty-two solid waste management districts, representing twenty-eight counties, in southern Indiana implemented a multi-media campaign, entitled "Back Home Again in Indiana," to educate the public about the illegality and toxicity of dumping municipal solid waste. Through the coordinated effort, southern Indiana's awareness of the adverse environmental impact and the illegality of dumping were brought to the forefront of the public's attention. Not only did the public gain a single point of contact for reporting illegal dumps, those dumping waste became aware that someone might be looking over their shoulder.

Pollution Prevention/Source Reduction

Fairfield Manufacturing Company, Inc.

Lafayette, Tippecanoe County

Contact: Bob Morton (765) 772-4529

Fairfield Manufacturing Company, Inc. replaced a copper cyanide plating process with a specially formulated painting process that is more environmentally friendly and safer for employees. In order to meet customer specifications certain portions of steel gear must be protected before passing through a high temperature furnace comprised of a carbon rich gas mixture. The gear is now protected through a process called masking. Fairfield's new masking process is as effective as plating but without the undesirable environmental or health exposure effects.

GE Plastics Mt. Vernon, Inc.

Mt. Vernon, Posey County

Contact: Tom Sommerfield (812) 831-7767

GE Plastics Mt. Vernon, Inc. identified then implemented a stabilizer for use in the Ultem® resin manufacturing process in May 2000. GE recognized a 45% reduction in hazardous waste generation because the stabilizer reduced the formation of heavy solids

and by products. GE also realized increased marketability of the base polymer resin due to improved clarity and stability.

Nishikawa Standard Co., New Haven Division

New Haven, Allen County

Contact: CoLette Schlegel (260) 493-7938 x 263

Nishikawa Standard Company, New Haven division extrudes and finishes rubber profile used in the automotive sealing systems industry. Nishikawa has reduced its hazardous waste by 59%, non-hazardous air pollutants by 27%, electrical consumption by 3%, and their industrial waste by 20%. These accomplishments were realized through the development and continual improvement of its Environmental Management System. Nishikawa's award-winning project included a process change of spooling the rubber profile and enhancing the secondary processes with new technology.

NTN Driveshaft, Inc.

Columbus, Bartholomew County

Contact: Bill Miller (812) 342-7000 x 252

In December, 1999, NTN Driveshift, Inc. implemented an Environmental Management System (ISO 14001) that was designed to build a culture of conservation, improve communication, strengthen employee training, and promote environmental awareness that would benefit employees, company, community, the planet earth, and future generations. These efforts have resulted in <u>reductions</u> in use of sulfuric acid by 9750 pounds, potable water by 500,000 gallons, lead grease by 273,672 pounds and calcium chloride by 44,900 pounds and a reduction in emissions of Volatile Organic Compounds (VOC) by 13.12 tons. NTN has also eliminated the use of quench oils with sodium nitrite.

Reilly Industries, Inc.

Indianapolis, Marion County

Contact: Roger Weigand (317) 247-8141 x 6619

In 2001, Reilly Industries, Inc. set out to improve upon reactor yield by changing the type of catalyst. The pollution prevention/source reduction endeavor proved to be successful with increased yields from the new catalyst greater than 20%. This improvement also resulted in fewer raw materials to make the desired product and much less waste from the reaction. Waste generation went from 21.1 metric tons per day to 8.26 metric tons per day (a greater than 60% decrease). The annualized cost savings are between \$2,000,000 and \$3,000,000. The capital and operational costs of modifying the process were under \$250,000. Product quality was not changed and continues to meet customer acceptance.

Toyota Motor Manufacturing, Indiana, Inc.

Princeton, Gibson County

Contact: Bill Harper (812) 387-3521

Toyota Motor Manufacturing, Indiana, Inc. (TMMI) implemented a pollution prevention/source reduction initiative in the electro-deposition process as part of their Environmental Management System. TMMI discovered that the pigment E6127 Gray Cationic Paste contained lead silicate as an additive to help provide corrosion protection. The Toyota Technical Center worked with PPG Industries, Inc., the supplier of the pigment, to develop a <u>lead-free pigment</u>. Since October of 2001, TMMI has eliminated the use of lead in their electro-deposition process and no longer has to manage the resultant waste stream as a hazardous waste for lead.

Valeo, Inc.

Engine Cooling Automotive Division

Greensburg, Decatur County

Contact: Iris Wilhoit (812) 527-3423

Valeo Engine Cooling Automotive Division eliminated a chromate conversion coating process by changing the substrate of their product to a corrosion resistant alloy. The original manufacturing process used hazardous chemicals, water and natural gas, while the resulting wastewater treatment process generated a hazardous waste and discharged an effluent containing fluorides. Benefits of the new process include the elimination of hazardous chemicals, water discharge and hazardous waste from the process. Additionally, there were cost savings from eliminating an entire process and associated labor, floor space made available for other manufacturing uses and a decrease in utility usage.

Recycling/Reuse

Branchville Correctional Facility

Tell City, Perry County

Contact: Richard T. Newton (812) 843-4349

Challenged by the Indiana Department of Correction's Division of Resource Recovery with reducing the amounts of refuse being sent to landfills the management of the Branchville Correctional Facility began an experimental vermicomposting program in 1998. This program expanded from 2 to 105 composting bins, which has met the recycling needs of the 980 offender low medium security correctional facility. Vermicomposting has allowed the facility to annually recycle an average of 41,000 lbs. of cardboard and 22,000 lbs. of food. Branchville has reduced its total output of trash to landfills up to 50% and is a working model for other correction facilities around the state.

Crane Army Ammunition Activity

Crane, Martin County

Contact: Doug Johnson (812) 854-1481

Crane Army Ammunition Activity (CAAA) has implemented several projects to reduce pollution from demilitarization operations. Recently, CAAA initiated two projects that resulted in the recycling of 886,904 pounds of material with cost savings of over

\$655,000. In the first project, CAAA reused red phosphorus Marine Location Markers to manufacture a different type of marker. In the second project, CAAA recovered sodium nitrate from an item that had normally been thermally disposed of. These initiatives are examples of many recycling and reuse efforts that CAAA is implementing to reduce pollution generated from demilitarization activities.

Eli Lilly and Company / Purdue University

Lafayette, Tippecanoe County

Contact: James J. King (765) 477-4266

Eli Lilly and Company and Purdue University created a synthetic soil called "Soilermaker" and an agricultural liming substitute by combining fermentation byproducts from the Lilly Tippecanoe Laboratories facility with ash from the fluidized bed reactor at the Purdue University Wade Utility Plant. The result was a very effective soil substitute and liming agent that has been used by the Indiana Division of Reclamation to aid in the reclamation of over 250 acres of acid mined area at the Chinook site in Clay County. The Chinook project collaboration between Purdue University, Eli Lilly and the Indiana Department of Natural Resources Division of Reclamation successfully converted the once barren site to a site that now supports a thick, diverse vegetative cover. It was a great example of how academia, industry, and regulators can work together as a team to solve critical environmental issues by utilizing waste by-products.

Target Stores of Indiana

Indianapolis, Marion County

Contact: Jill Luckett (317) 248-5450

In 1991, when Target decided to have an in-house team to assess and amend all environmental aspects of how this large retailer was doing its business, it was at the cutting edge of the environmental movement in retailing. Since then, Target has implemented an effective national program of waste reduction (the future goal being zero waste). Target is the first major retailer to virtually eliminate excess packaging on clothing lines and works with other vendors to minimize packaging; performs yearly self-assessment of its environmental operations and publishes the results in an annual report; and offers products made from recycled content. As a local example, the Indianapolis Distribution Center has demonstrated annual recycling of 6,260 tons of cardboard.

Honorable Mention Certificates

Land Use

Lake Erie Land Company

For developing the Coffee Creek Center with a commitment to the environment by creating neighborhoods with a variety of housing types and price ranges while also planning for a diverse range of commercial opportunities.

Williams Gas Pipeline – South Central

For their efforts in protecting Indiana's natural resources, archaeology and the environment during the construction of a natural gas pipeline expansion project in Dearborn County.

Outreach and Education

Lake County Solid Waste Management District

For developing a second Environobile complete with a unique summer curriculum, a special events outreach program and an Environobile resource sharing initiative.

Bartholomew County Solid Waste Management District

For offering environmental education via a dedicated education center, landfill tours, and recycling and reuse opportunities at the municipal landfill.

Pollution Prevention/Source Reduction

Kimball Electronics Auburn

For implementing a certified ISO 14001 Environmental Management System that has <u>eliminated the use of volatile organic compounds</u> and redesigned a process to remove a mercury tilt switch.

Monaco Coach Corporation

For implementing a program to increase transfer efficiency in the open mold spray lay-up process by training employees to properly apply resins and gelcoats.

Recycling/Reuse

Eli Lilly and Company – Indianapolis Operations

For the Asset Recovery Department of Indianapolis Operations implementing an effective Lilly "Teacher Day Event" where surplus lab equipment, lab supplies and office supplies are donated to local schools and universities.

Jefferson County Environmental Roundtable

For rescuing computers destined for the landfill and refurbishing them for service organizations and low income households.

Shelby Materials

For implementing a recycling program that has allowed the Beech Grove plant to be a zero discharge site.

Governor's awards are competitive and recognize exemplary programs. For additional information, visit our Web site: http://www.in.gov/idem/oppta/govawards/ or call 1-800-988-7901.